

'Can,' Compatibilism, and Possible Worlds

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“‘Can,’ Compatibilism, and Possible Worlds,” *Canadian Journal of Philosophy*, 11 (1981): 679-691.

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Article:

Most compatibilists have sought to defend their view by means of an analysis of the concept of 'can' in terms of subjunctive conditionals.¹ Keith Lehrer opposes this analysis;² he nevertheless embraces compatibilism.³ In a recent paper he has proposed a novel analysis of the concept of 'can' within the framework of possible-world semantics.⁴ The paper has provoked considerable discussion.⁵ In it Lehrer claims that he demonstrates the truth of compatibilism (p. 241).⁶ Others have claimed that this is not so,⁷ but at least one commentator has asserted that Lehrer's analysis strongly supports compatibilism.⁸ In this section I shall give a brief exposition of relevant portions of Lehrer's account of 'can' and then in the next section I shall seek to show that it fails to render compatibilism any more plausible than incompatibilism. Indeed, I shall seek to show that, if one of Lehrer's primitive concepts (the concept of an 'advantage') is understood as it seems it should be understood, then there would seem to be good reason to believe that his analysis supports not compatibilism but incompatibilism.

There are many aspects of Lehrer's account of 'can' that cannot be covered in this section, but here are the relevant highlights.⁹ To set the stage of his inquiry, Lehrer gives an account of what it is for an action to be ancestrally determined (pp. 244-5). He says, first of all, that (where 'W' names the actual world) a condition C occurring at a time t_i in W determines that a condition C* occur at a time t_n in W just in case (i) t_i is earlier than t_n , (ii) there is some possible world w in which C occurs at t_i but C* does not occur at t_n , but (iii) in every possible world w that has the same laws as W and where C occurs at t_i , C* does occur at t_n . He then says that a person S's doing an action A at t_n in W is ancestrally determined just in case (i) for some time t_i and some condition C, C occurring at t_i in W determines that S do A at t_n in W, and (ii) for every time t_i and every condition C, if C occurring at t_i in W determines that S do A at t_n in W, then, for some time t_h and some condition C*, C* occurring at t_h in W determines that C occur at t_i in W. And so it is Lehrer's aim to show that its being ancestrally determined that S not do A at t_n in W does not imply that there is no time t_i such that S can at t_i do A at t_n in W; that is, to put it more simply but less precisely, it is Lehrer's aim to show that it is possible that a person can perform an action even though his not doing so is ancestrally determined.

Lehrer notes (p. 254) that it follows neither merely from the fact that there is some possible world w in which S does A at t_n , nor merely from the fact that there is some possible world w with the same laws as W and in which S does A at t_n , that there is a time t_i such that S can at t_i do A at t_n in W. Some restriction is required, and, as a first step, Lehrer calls upon Pollock's concept of minimal difference (pp. 245-8).¹⁰ Pollock analyzes a statement of the form

(1) If C were to occur at t_i , then S would do A at t_n

by means of a statement of the form

(1 a) For every world w, if w is minimally different from W with respect to C's occurring at t_i , then S does A at t_n in w.¹¹

In pursuing his account of 'can' Lehrer invokes the concept of minimal difference by talking of the need to find

a possible world which is 'minimally changed to accommodate' S 's doing A at t_n . A slightly odd feature of such talk (given (1a)) is the absence of any mention of a condition with respect to which the possible world in question is supposed to be changed to 'accommodate' S 's doing A at t_n . At any rate, when indulging in such talk, Lehrer in fact appears implicitly to rely on the following:

(2) At t_i world w accommodates, with respect to world w^* , S doing A at t_n if and only if there is a condition C such that:

- (i) t_i is not later than t_n ;
- (ii) w is minimally different from w^* with respect to C 's occurring at t_i ; and
- (iii) S does A at t_n in w .

Lehrer also makes the assumption that for every world w , every world w^* , every condition C , and every time t_i , if w is minimally different from w^* with respect to C 's occurring at t_i , then w has the same laws as w^* . He then considers the following proposal (p. 254):

(3a) S can at t_i do A at t_n in W if and only if there is a world w such that at t_i w accommodates, with respect to W , S doing A at t_n .

But (3a) is too liberal. As Lehrer remarks (p. 254), it may be, for example, that I cannot move from a wall, despite being anxious to do so, because I am chained to it; and yet we can find a possible world w which is minimally changed to accommodate my moving. Indeed, it seems that any world which is minimally different from W with respect to my being chained would satisfy what is required of w . But any such world is too different from W ; for in it I enjoy an advantage that I lack in W , namely, the advantage of being unchained, and it seems to be this fact which renders (3a) too liberal as an account of 'can.' So Lehrer considers the following proposal (p. 255):

(3b) S can at t_i do A at t_n in W if and only if there is a world w such that:

- (i) at t_i w accommodates, with respect to W , S doing A at t_n ; and
- (ii) S has no advantage at t_i in w for doing A at t_n that he lacks at t_i in W .

But (3b) is still too liberal, since it may be the case that I have the advantages I need at t_i to do A at t_n , but that something occurs after t_i but before t_n to prevent me from doing A at t_n . However, to modify (3b) by substituting 'In' for each occurrence of ' t_n ' in clause (ii) would make the analysis too restrictive, since some advantages a person acquires after t_i are ones that he may acquire simply as a result of what he does after t_i , and it seems that these advantages should not be ruled out. As Lehrer remarks (p. 256), if at t_i I stay at home rather than go to the airport, it does not follow that I cannot at t_i catch a flight at t_n to Washington, even though in a world where I do go to the airport I have an advantage at t_n that I lack in W , namely, the advantage of being in the airport.

These considerations lead Lehrer to the conclusion that a distinction between types of advantages is called for; some will be admissible and some not. Lehrer provides a detailed, recursive definition of 'admissibility' in this context which amounts roughly to the following (pp. 256-7): an advantage is admissible for S (even though S in fact lacks it) as long as, had S initiated a course of action which he in fact did not initiate, he would have secured this advantage for himself, and the initiation itself would have required no advantage that S lacked. Given this notion of admissibility, Lehrer is finally in a position to propose his own analysis of the concept of 'can.' It is this (p. 256):

(3c) S can at t_i do A at t_n in W if and only if there is a world w such that:

- (i) at t_i w accommodates, with respect to W , S doing A at t_n ; and
- (ii) for every time t_j not earlier than t_i and not later than t_n and for every advantage v for doing A at t_n , if S has v at t_j in w and lacks v at t_j in W , then v is admissible for S from W .

In Lehrer's own words, what (3c) amounts to is roughly this (p. 257):

The intuitive idea captured by our analysis is that a person could (at t_i) have done A at t_n just in case there is a possible world or scenario beginning at t_i in which what the person does culminates in his doing A at t_n . It is crucial that at t_i and subsequently to t_n he not have any advantages in the scenario for doing A at t_n which he, in fact, lacks, except those that result from what he does earlier, though not prior to t_i .

Lehrer's main contention, given (3c), is of course that its being ancestrally determined that S not do A at t_n in W is compatible with the possibility that, for some time t_i , S can at t_i do A at t_n in W . Now, it is certainly true that any such incompatibility is not formally deducible from (3c) without the aid of some axioms concerning the concept of an advantage. But it is Lehrer's contention that the provision of any such axioms is quite unwarranted. To support this contention he says the following (p. 266):

I can find no reason whatever for supposing that a condition that determines my not performing some action, even a condition that existed before I was born, should have the result that at every subsequent time I lack some advantage I needed to perform the action. To be sure, if I have the required advantages, I shall not use them because, by hypothesis, I do not perform the action. But the determination might explain why I do not make use of the advantages I have ... and, therefore, not entail that I lacked some advantage needed to perform the action. It is my contention that many human actions are to be explained in just this way.

II

Lehrer's account of 'can' is original, far-reaching, and complex. For all these reasons it deserves careful consideration. Now, the foregoing exposition of this account is incomplete in many respects, but it should suffice for my statement of (and the reader's subsequent evaluation of) the criticisms that follow.¹²

I have no quarrel with Lehrer's characterization of the concepts of one condition's determining another and of one condition's ancestrally determining another. Moreover, Lehrer is obviously right to dismiss the suggestion that there being a possible world in which S does A at t_n implies that S can (at t_i) do A at t_n in W ; so too with the suggestion that there being a possible world with the same laws as W and in which S does A at t_n has this implication. My first difficulty with Lehrer's account arises with his invocation of the concept of minimal difference. Certainly the two suggestions just mentioned are too liberal, and certainly (3a) is more restrictive than either of them. But, as Lehrer himself points out, (3a) still requires restriction. The restriction that Lehrer imposes concerns the concept of an advantage, and once this concept has been invoked, there would seem to be little need to make use also of the concept of minimal difference. In my opinion, (3b) and (3c) could both be harmlessly simplified by striking clause (i) of each.¹³ Perhaps Lehrer would demur. Perhaps he would say that it is possible that there be a possible world which at no time accommodates, with respect to W , S doing A at t_n and yet in which S does A at t_n with no, or at least admissible, advantage; and perhaps Lehrer would say that there being such a world does not imply that S can at some time t_i do A at t_n in W . I do not know, and my ignorance is partly due to the fact that I am unclear as to just what constitutes a minimal change and what does not.

More important than coming to grips with the concept of minimal difference, however, is coming to grips with the concept of an advantage; for it is this concept that lies at the heart of Lehrer's analysis. It has already been noted that, without the provision of certain axioms concerning this concept, the following implication is not formally deducible from (3c) (or from anything that leads up to it):

(4) If it is ancestrally determined that S not do A at t_n in W , then there is no time t_i such that S can at t_i do A at t_n in W .

But it should also be noted that the negation of (4) is also not formally deducible from (3c) (or from anything that leads up to it). This fact in itself undermines Lehrer's contention that he has demonstrated the truth of compatibilism. For note that it is open to one to accept Lehrer's account of 'can' and yet to insist that incompatibilism is true. One may do this simply by claiming that, if S not doing A at t_n in W is causally necessitated, any world in which S does A at t_n (and hence in which S not doing A at t_n is not causally necessitated) is one where S enjoys an enormous and inadmissible advantage for doing A at t_n , to wit, the advantage of its not being causally required that he not do A at t_n .¹⁴ Now Lehrer certainly says (see the quotation which completes my exposition of his account) that he finds no reason to accept this incompatibilist claim, but I in turn find no reason not to accept it. For it seems to me that this move is open to the incompatibilist unless and until an account of the concept of an advantage is given which rules the move out.

The main point to be made here is, of course, that the tenability of Lehrer's version of compatibilism is contingent upon an adequate account of the concept of an advantage. But Lehrer provides no such account. It is reasonable, however, to interpret some of his remarks (pp. 254-7) so that he is seen to have roughly the following account of the concept of an advantage in mind:

(5) S has at t_i in w an advantage for doing A at t_n that he lacks at t_i in w^* if and only if either

- (i) S has at t_i in w a better opportunity to do A at t_n than he has at t_i in w^* , or
- (ii) S has at t_i in w a better ability to do A at t_n than he has at t_i in w^* .

Now, I stress that Lehrer does not explicitly endorse (5) — to repeat, it is the lack of any such explicit characterization of the concept of an advantage which constitutes one of the main problems with his paper — but, given that it appears reasonable to ascribe it to him, the question to which we should now address ourselves is this. Does Lehrer's account of 'can' imply the truth of compatibilism when the concept of an advantage is understood as it is in (5)?

In an interesting comment on Lehrer's paper, Terence Horgan makes certain remarks which strongly suggest the following argument.¹⁵ It would seem that

(6) S can at t_i do A at t_n in W

is equivalent to

(6a) S has at t_i both the ability and the opportunity to do A at t_n in W .¹⁶

If we construct the inelegant neologism 'canning' from the verb 'can,' we may infer from the equivalence of (6) and (6a) the following:

(7) The concept S canning at t_i do A at t_n in W is identical with the concept S having at t_i both the ability and the opportunity to do A at t_n in W .

But since, according to (5),

(8) The concept of an advantage is to be understood in terms of the concepts of ability and opportunity, we may conclude

(9) Lehrer's analysis of the concept of 'can' is conceptually circular.

Whether or not the foregoing argument is correctly ascribed to Horgan, I think we can fairly easily see that it is inconclusive.¹⁷ For, first of all, it is not at all clear that one proposition's being equivalent (that is, strictly equivalent) to another implies that the concepts constructed from them in the manner of (7) are identical. For a criterion of identity for concepts would first have to be agreed upon. Secondly, even granting that (7) is true, it is not clear that (9) follows from (7) and (8). It would seem at least that (8) should be strengthened to read as follows:

(8a) The concept of an advantage is to be understood only in terms of the concepts of ability and opportunity, and even then it is not clear that (9) would follow.

I do not think, therefore, that Lehrer's account of 'can' is properly accused of suffering from conceptual circularity, even when it is extended by the explicit addition of (5). But other objections may be raised against it, and on various levels. Consider the following argument:

Argument A: (1) It is ancestrally determined that S not do A at t_n in W .

Therefore (2) There are a condition (call it C) and a time (call it t_i) such that C occurring at t_i in W determines that S not do A at t_n in W .

Therefore (3) C occurs at t_i in W ,

and (4) For every world w , if w has the same laws as W and C occurs at t_i in w , then S does not do A at t_n in w .

(5) For every time t_j , if S can at t_j do A at t_n in W , then there is a world w such that (a) w has the same laws as W , (b) for every event B and every time t_i not later than t_j , if B occurs at t_i in W then B occurs at t_i in w , and (c) S does A at t_n in w .

Therefore (6) S cannot at t_i do A at t_n in W .

Therefore (7) If it is ancestrally determined that S not do A at t_n in W , then there is no time t_i such that S can at t_i do A at t_n in W .

Argument A constitutes an attack on Lehrer's account without making mention of the concept of an advantage. In order to block the conclusion, Lehrer must deny the truth of the fifth line of the argument. This denial strikes me as highly unintuitive. What such a denial amounts to is roughly the following: it is possible that ' S can at t_i do A at t_n in W ' be true even though there is no world w having the same laws as W (and this includes W , of course) in which S 's past history up to and including t_i is as it in fact is (i.e., as it is in W) and in which S does A at t_n . Or in other, even rougher, words: it is possible that S can at t_i do A at t_n even though his actually doing A at t_n requires that the past (that is, the world's history prior to t_i) be altered, i.e., requires that an indefinite number of events, which in fact did occur prior to t_i , never occurred.

I think Argument A spells trouble for Lehrer. If we now invoke the concept of an opportunity, we may produce a short argument which, in my opinion, spells trouble for any compatibilist. Consider the following principle:

(P1) If it is ancestrally determined that S not do A at t_n in W , then there is no time t_i such that S has at t_i in W an opportunity to do A at t_n .

(P1) seems to me to be true. Lehrer might not agree, but nothing in his paper implies that it is false. Now

consider the following argument:

Argument B: (1) For every time t_i , if S can at t_i do A at t_n in W , then S has at t_i in W an opportunity to do A at t_n .
(2) (P1)

Therefore (3) If it is ancestrally determined that S not do A at t_n in W , then there is no time t_i such that S can at t_i do A at t_n in W .

Both premises seem true to me. I think that we may construe certain of Lehrer's remarks (p. 242) as an endorsement of the first premise of Argument B so that, if he were confronted with this argument, he would have to deny the truth of (P1) (though on what grounds I cannot say)).¹⁸

If neither Argument A nor Argument B is sufficiently troubling to Lehrer, it may yet be pointed out, in answer to our principal question as to whether or not Lehrer's account of 'can' implies the truth of compatibilism when the concept of an advantage is understood as it is in (5), that it can be shown that it is open to the incompatibilist to accept Lehrer's account insofar as it is constituted by (3c) (and what leads up to it) together with the account of the concept of an advantage that is provided by (5). In order for this to be demonstrated, (P1) and also some further principles must be invoked. The other principles are:

(P2) If there is no time t_i such that S has at t_i in W an opportunity to do A at t_n , then, for every world w and every time t_j , if S has at t_j in w an opportunity to do A at t_n , then this opportunity is inadmissible for S from W .

(P3) For every world w , every opportunity o , and every time t_i , if S has o at t_i in w and o is inadmissible for S from W , then there is an advantage v such that S has v at t_i in w and v is inadmissible for S from W .

(P4) For every world w , if S does A at t_n in w , then there is a time t_i such that S has at t_i in w an opportunity to do A at t_n .

Each of these principles is perhaps more controversial than its successor, but each seems reasonable to me. (P2) of course relies on the concept of admissibility with regard to opportunities. I shall not provide an analysis of this concept here; I expect that it would be possible to give some recursive analysis akin to that given by Lehrer for the concept of admissibility with regard to advantages. The plausibility of (P2) rests on the observation that at no time does S have in W an opportunity to do A at t_n ; hence it would seem that, if in some world w he does at some time have such an opportunity, the opportunity must arise from some prior action of his in w for which he has some advantage inadmissible for him from W . This reasoning, is, of course, not conclusive, and (P2) is perhaps the most questionable principle of the four principles invoked here. (P3), given a proper understanding of the admissibility of opportunities, would seem to follow directly from (5). But I shall not attempt to show this, and so I include it as a new principle. Finally, (P4) seems to be obviously true.

With the aid of (P1) through (P4) and Lehrer's account of 'can' (namely, that contained in (3c)) I shall now derive that proposition which serves as a conclusion to both Argument A and Argument B, i.e., I shall now derive (4).

Argument C: (1) It is ancestrally determined that S not do A at t_n in W .

(2) (P1)

Therefore (3) There is no time t_i such that S has at t_i in W an opportunity to do A at t_n .

(4) (P2)

Therefore (5) For every world w and every time t_i , if S has at t_i in w an opportunity to do A at t_n , then this opportunity is inadmissible for S from W .

(6) (P3)

Therefore (7) For every world w and every time t_i , if S has at t_i in w an opportunity to do A at t_n , then S has at t_i in w an advantage for doing A at t_n and this advantage is inadmissible for S from W .

(8) (P4)

Therefore (9) For every world w , if S does A at t_n in w , then there is a time t_i such that S has at t_i in w an advantage for doing A at t_n and this advantage is inadmissible for S from W .

(10) (3c)

Therefore (11) For every time t_i , if S can at t_i do A at t_n in W , then there is a world w in which S does A at t_n and in which S does not have at t_i an advantage for doing A at t_n which is inadmissible for S from W .

Therefore (12) There is no time t_i such that S can at t_i do A at t_n in W .

Therefore (13) If it is ancestrally determined that S not do A at t_n in W , then there is no time t_i such that S can at t_i do A at t_n in W .

I think that the strength of Argument C lies in the fact that none of (P1) through (P4) is as strong a principle as those expressed in the fifth line of argument A and in the first line of Argument B. This being so, any claim by a proponent of compatibilism that Argument C in some manner 'begs the question' is even less warranted than such a claim would be when made with regard to Argument A or Argument B. I can imagine, however, that Lehrer would wish to dispute not only (P1) but also (P2), though, again, I do not know on what grounds he would do so. But this fact, if it is a fact, is not so important as the fact that nothing in Lehrer's paper serves to rule out any of (P1) through (P4). This being the case, and given that (4) is provable from them and (3c), it is certainly not true that Lehrer's analysis of the concept of 'can' implies the truth of or even strongly supports compatibilism, even when the key concept of an advantage is understood as it seems it should be (i.e., as it is in (5)). His analysis fails to render compatibilism any more plausible than incompatibilism. Indeed, if, as I believe, (P1) through (P4) are reasonably held to be true, then Lehrer's analysis appears to support, not compatibilism, but incompatibilism.¹⁹

Notes:

1 The type of 'can' at issue here is that which features in such sentences as 'Smith can run a four-minute mile,' 'Jones can recite the Greek alphabet backwards,' and so on, when these are understood in the most natural manner and understood to imply that there is nothing preventing the agent from performing the action in question. I shall not elaborate on this here; the matter should be familiar enough. Among the most prominent proponents of the conditional analysis of this concept of 'can' are Hobbes, Locke, Hume, Jonathan Edwards, Mill, Moore, Schlick, Stevenson, Ayer, and P.H. Nowell-Smith.

2 Keith Lehrer, 'An Empirical Disproof of Determinism?', in Keith Lehrer, ed., *Freedom and Determinism* (New York: Random House 1966) 195-7; and "Can" in *Theory and Practice: A Possible Worlds Analysis*, in Myles Brand and Douglas Walton, eds., *Action Theory* (Dordrecht, Holland/Boston, U.S.A.: D. Reidel Publishing Company 1976) 248-50. Henceforth I shall refer to the latter article as 'CTP.'

3 I take compatibilism to be the doctrine that it is logically possible that determinism be true and free action yet occur; incompatibilism is the denial of this possibility. The link between 'S freely does A' and 'S can do A' is one that I shall not explore here, except to say that the truth of the former implies the truth of the latter.

4 Lehrer, CTP.

5 Terence Horgan, 'Lehrer on "Could"-Statements,' *Philosophical Studies*, 32 (1977) (henceforth I shall refer to

this article as 'LCS'); Robert Audi, 'Avoidability and Possible Worlds,' *Philosophical Studies*, 33 (1978) (henceforth I shall refer to this article as 'APW').

6 All such page-references will be to the text of CTP.

7 Horgan, LCS, 409; Audi, APW, 419.

8 Audi, APW, 419.

9 The account that follows is not only an abbreviated, but also a somewhat reconstructed, version of the original. The reconstruction is undertaken out of a desire for uniformity both of exposition and of evaluation. I believe that no distortion of Lehrer's position results from it; indeed, his position is somewhat clarified because of it.

10 John L. Pollock, *Subjunctive Reasoning* (Dordrecht, Holland/Boston, U.S.A.: D. Reidel Publishing Company 1976).

11 This is putting the matter only in rough form. Pollock in fact distinguishes between many kinds of subjunctive conditionals.

12 For example, I shall ignore remarks made by Lehrer to the effect that an event may be ancestrally determined even though none of its causes occurs more than ten minutes before it does.

13 Audi (APW, 414) also suggests that the concept of minimal difference is dispensable.

14 Horgan gives this argument (LCS, 409-10).

15 Horgan, LCS, 407-9.

16 Horgan obviously relies at this point on P.H. Nowell-Smith's analysis of the concept of 'can,' as presented in the latter's *Ethics* (Harmondsworth, Middlesex: Penguin Books 1954) Chapter XIX. But it should be noted that, despite its other problems which I discuss immediately below, the present argument is further undermined by the fact that Lehrer explicitly rejects (CTP, 242) Nowell-Smith's analysis.

17 Audi concurs (APW, 418).

18 Perhaps the grounds are to be found somewhere in his remarks on p. 266 of CTP, but I am not sure of this.

19 I am grateful to Fred Feldman, and also to referees of the *Canadian Journal of Philosophy*, for valuable advice on an earlier draft of this paper.